DOCUMENT RESUME

ED 379 088 PS 022 972

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TITLE Developmental Screening & Assessment.
INSTITUTION San Bernardino County Preschool Services Dept., San Bernardino, CA.
PUB DATE Nov 93
NOTE 39p.; Paper presented at the National Head Start Research Conference (2nd, Washington, DC, November 4-7, 1993).
AVAILABLE FROM Preschool Services Department, 250 South Lena Road, San Bernardino, CA 92408 (1 copy free).
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Cognitive Ability; Cognitive Measurement; Developmental Disabilities; Developmental Stages; Evaluation Methods; Evaluation Research; Inservice Teacher Education; Low Income Groups; *Placement; *Preschool Children; Preschool Education; Program Effectiveness; *Screening Tests; Standardized Tests; Test Construction; *Testing; *Test Validity
IDENTIFIERS California (San Bernardino County); *Project Head Start

ABSTRACT

In light of debate about the developmentally inappropriate and culturally questionable use of standardized testing for placement of preschool children, alternative approaches to screening and assessment are required. The impact of a Head Start program upon children must involve documentation of physical and mental health, speech, hearing, vision, and overall wellness, as well as traditional developmental domains. In 1988, the Preschool Services Department of the San Bernardino County (California) Head Start Program reviewed a variety of developmental screening instruments, but decided to refine and use its own instrument, the Child Development Screening Form. The developmental status of 5,000 Head Start children was sampled during 2 consecutive program years using 60 observable behaviors representing standard developmental milestones. Teachers and aides attended inservice training for using the screening form. Screening was done both pre-program and post-program. For one of the sample years, the 2,753 children showed demonstrable developmental gains, an average of about 6 points across all domains out of a possible 20. Children with disabilities averaged an 11 point gain. The current version of the screening form has a developmentally appropriate set of items and differentiates development trajectories and variations. It is user- and child-friendly, economical, and meets Head Start requirements. (The screening form, charts of screening results, and 25 references are included.) (TM)

ED 379 088

DEVELOPMENTAL SCREENING & ASSESSMENT

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2nd National HEAD START Research Conf.
Translating Research into Practice
Washington, D.C.; Nov. 4-7, 1993

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Poster Presentation for 2nd National Head Start Research Conference TRANSLATING RESEARCH INTO PRACTICE: IMPLICATIONS FOR SERVING FAMILIES WITH YOUNG CHILDREN (Nov. 4-7, 1993, Washington, D.C.)

Systematic Screening & Assessment for Head Start

By John H. Meier, Ph.D.[1]

Introduction and Rationale

This paper presents current research findings derived from developmental screening of more than 5000 Head Start children during two consecutive program years (1991-92 & 1992-93), These children were participants in a large program in the Preschool Services Department's Head Start Program in San Bernardino County, California, which serves preschool children and their families who reside in a wide variety of rural and urban, multiethnic, multi-generational, and impoverished families and ecologies.

In the wake of more than a decade of legislation and professional debates about the developmentally inappropriate and culturally questionable use of standardized testing for placement or exclusion of preschool children in various programs, alternative or refined approaches to systematic screening and assessment must be created. The National Head Start Bureau acknowledged its concern by devoting an entire issue of its Bulletin to Screening and Assessment in Head Start (USDHHS, Jan.-Feb., 1993). In order to illustrate the

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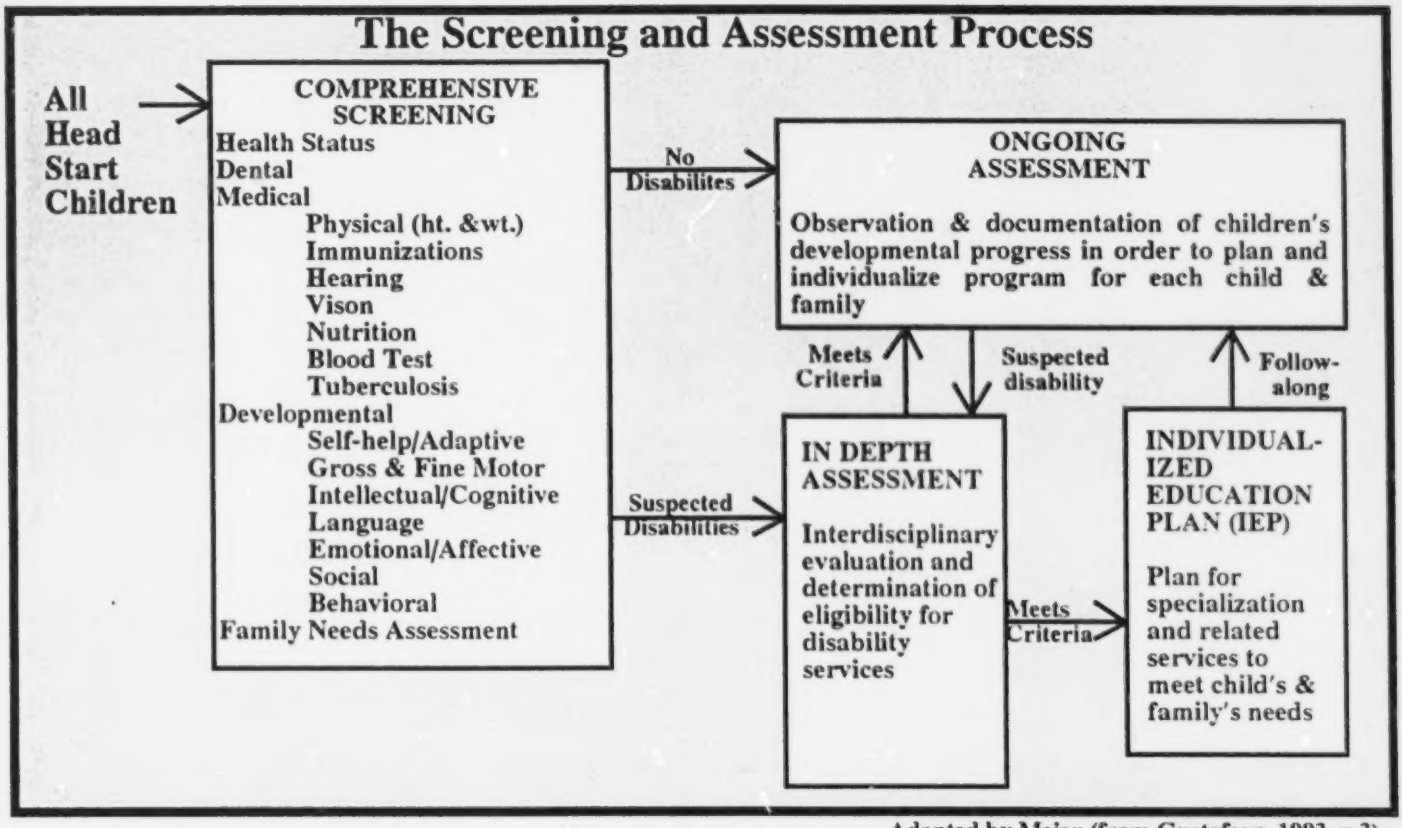
[1]Dr. Meier is a clinical/developmental psychologist in charge of Psychological Services for the San Bernardino County Preschool Services Department, Hortense Hunn, Exec. Director.

interrelationships among various phases of the Screening and Assessment Process, a graphic diagram was included in the lead article (Gustafson, 1993), has been elaborated upon by Meier, and is herein presented as Figure 1.

Since Head Start rightly takes pride in being the largest comprehensive child development program in the world and is increasingly concerned with quality control and accountability, it is essential that its impact upon its child and family participants be documented. In order to document positive impact, and program efficacy, it is necessary to determine desirable change (or prevention of undesirable events) resulting from program participation. Although parent involvement and family participation are critical to Head Start's optimal functioning (and would lend themselves to a similarly systematic evaluation), this paper is focused exclusively on the developmental screening and assessment of preschool children. Comprehensive screening involves physical and mental health, speech, hearing, vision, and overall wellness -- in addition to traditional developmental domains addressed in this paper.

According to the new rules and regulations regarding Head Start services to children with disabilities (Final Rule published in Federal Register, Jan. 21, 1993), comprehensive developmental screening must be accomplished within 45 calendar days after each child's entry into the Head Start program. In addition to the Head Start Program Performance Standards and the Individuals with Disabilities Education Act [(IDEA) (22 U.S.C. 1400 et seq,)], In Subpart D: Health Services (1308.6) is found a new section for the Health Performance Standards which describes the full process of Assessment of Children,



Adapted by Meier (from Gustafson, 1993, p.3)

Fig. 1. Comprehensive screening of all preschool children should lead to systematic and developmentally appropriate intervention

including screening, developmental assessment and evaluation.

Some of the key points include the stipulation that acceptable screening consists of standardized health screening and developmental screening. The first stage of a comprehensive system should be an efficient (quick, simple, and inexpensive, though comprehensive) developmental screening of all children (and families) in a given preschool population in order to identify the children who need additional more refined developmental assessment and evaluation, which in turn should inform individualized treatment planning.

The developmental screen should address all developmental domains including Self-Help, Gross Motor, Fine Motor, Socio/Emotional (affective), Thinking (cognitive), and Language development. A major purpose of the total health and developmental screening and assessment process is to help determine which Head Start enrollees will meet the eligibilty criteria for the following disabilities categories: Health Impairment, Emotional / Behavioral Disorders, Speech or Language Disorders, Mental Retardation, Hearing Impairment (including deafness), Orthopedic Impairment, Visual Impariment (including blindness), Learning Disabilities, Autism, Traumatic Brain Injury, and Other Impairments (USDHHS. Federal Register, 1/21/93, Sections 1308.7 -- 1308.17). These categories are similar to those in IDEA and the rationale for identifying disabilities as early as possible is that many of these conditions are most amenable to effective intervention at their incipiency -- and it takes time to actually get appropriate treatment services initiated. An IEP meeting should occur within 30 days after a given child has been diagnosed and certified as

falling within one of the above disabilities categories.

More than two decades ago, the U.S. Department of Health, Education and Welfare sponsored a national conference, which resulted in the production of several scientific publications regarding the screening and assessment of young children at developmental risk (Meier, 1973a & 1973b). The conference and its proceedings impacted favorably on the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) legislation and program launched by H.E.W. Screening, based on universally applicable, culture-free and empirically validated developmental milestones, was proposed and has been partially implemented for a number of years. However, the chronic critical issues of validity, reliability, selectivity and specificity of the instruments and procedures continue to plague the field and contribute to the evolution of the present state of the art and science of developmental screening and assessment of young children.

Meeting the family income eligibility criteria for Head Start and thus growing up in an impoverished ecology places many children at some risk of developmental delay or impairment (even prior to conception). Head Start was conceived to provide comprehensive child development services to needy children and their families in order to at least partially compensate for their otherwise compromised beginnings. Systematic and comprehensive screening and assessment of program participants should enable the program to identify specific individual developmental delays and disabilities and to provide developmentally appropriate intervention and remediation as early as possible,

including: Chicago Early Assessment (City of Chicago Board of Education, 1981); Child Observation Record (High/Scope Educational Research Foundation, 1992); Denver Developmental Screening Test (Frankenburg & Dodds, 1969); DIAL (Haynes, 1970); Early Screening Inventory (Meisels & Wiske, 1983); Florida Diagnostic Learning and Resources System (Greenfield & Gold); Inventory of Early Development (Brigance, 1978); Learning Aptitude Profile (LAP, Univ. of North Carolina, 1980); MAPS -- Observational Checklist (Bergan, et al., 1988); McCarthy Screening Test (McCarthy, 1970); and Preschool Attainment Record (Doll, 1966). In 1988, several members of the Preschool Services Department staff reviewed a variety of developmental screening instruments in accordance with a matrix of criteria (please see Fig. 2) to determine which approach to use for the PSD San Bernardino County Head Start Program; it was decided that PSD would continue to further refine and use its own instrument which is included in this report (please see Fig. 3, five pages).

For those children who are suspected to have developmental delays or disabilities (especially in the language domain, which accounts for nearly two-thirds of PSD's certified disabilities) and/or behavior disorders (such as Attention Deficit Disorder, with or without Hyperactivity), some additional screening and assessment instruments and procedures were reviewed and resulted in the Speech Screen (English and Spanish versions, PSD & Elder, 1993 revision -- Fig. 4) and the Emotional/Behavioral Disabilities observational guide (PSD & Meier, 1992 -- Fig. 5).

Implications and recommendations for further applications and research

NAME OF INSTRUMENT / PROCEDURE	DEVELOPMENTAL DOMAINS INCLUDED	EASY TO ADMINISTER "USER FRIENDLY"	CLEAR INSTRUCTIONS	INTERESTING TO CHILD "SUBJECT FRIENDLY"	EASY TO INTERPRET	USEFUL FOR LESSON PLANS	RELATED TO CURRICULUM	DEVELOPMENTALLY APPROPRIATE	SUITABLE FOR AGE RANGE	CULTURE - FAIR MULTI-ETHNIC	EASY TO SCORE AND REPORT	PRE-TEST POST-TEST	COMPUTERIZED QUICK RESULTS	COST PER CHILD (MATERIALS NOT TIME/TRAINING)
Screening Children For Related Early Educ. Needs (Screen)	Visual Perception, Delays in Academic Areas, Education needs, strengths, weaknesses oral language, wording, math.	NO	NO	YES	NO (3)	NO (2) YES	NO	NO	YES	NO	NO	NO	NO	.60¢
Early Screening Inventory	Visual, Motor, Cognitive, Gross body awareness, language, math, reading	YES	YES	NO	YES	YES	?	YES	NO	YES	YES	YES	?	$1
Chicago Early + Social/Emotional Checklist	Gross Motor, Fine Motor, Visual, Memory. Language?	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES	YES	NO	$1
PSD Child Development Screening Form	Self-Help, Personal/Social Fine/Gross Motor, Thinking Language	YES	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	.20¢
Measures and Planning System (MAPS)	Early math, emergent literacy science/math social development	YES	YES	NO	WAIT	NO	YES	YES	YES	NO	YES	YES	WAIT	$10
DIAL R	Motor Concepts Language See What Child Is	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	YES	.50¢
Child Observation Record (COR)	Initiative, Social Relations, Creativity, Music and Movement, Language and Literacy, Logic and Math	NO	NO	NO	NO	YES	YES	YES	YES	YES	NO	YES	NO	$10
Learning Accomplishment Profile	Gross Motor, Fine Motor Prewritings, Language, Cognitive, Self-Help, Personal/Social	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	$2

FIGURE 2. MATRIX OF CRITERIA FOR SCREENING AND ASSESSMENTS

CHILD DEVELOPMENT SCREENING FORM

CHILD'S NAME: _____ BIRTHDATE: _____

SITE NAME: _____ CHILD'S AGE (at Pre-screen)_____

The teacher and I have reviewed the screening results for my child.

_____ Date: _____
Signature of Parent/Guardian Pre-screen

_____ _____
Post-screen

_____ Date: _____
Signature of Teacher/Rater Pre-screen

_____ _____
Post-screen

SCREENING/OBSERVATION INSTRUCTIONS

Pre-screening should be completed between 2 and 4 weeks after child is enrolled in preschool program; post-screening at end of school year; and mid-screening (optional) around the middle of the program year for child. Observation of children requires careful watching and listening for patterns and using the information to rate their developmental progress on these representative tasks.

A. Observe one child at a time--the items are for children 3-5 years old.

B. Focus on what the child does; keep notes for inclusion in comments.
Incorrect example: "George always squints" (light is too bright?).
Correct Example: "George squints when he is working on the puzzles at the table" (may indicate a problem with close-up vision, requiring an appropriate referral).

C. Observe the child in different activities, with other children and with adults.

D. Please follow this key for rating the child on each task:

0	=	child cannot do task at all
1	=	child can do task sometimes but not always (partial mastery)
2	=	child can usually do task completely
N	=	child refused to do task or was not observed for this task

Figure 3a. ©

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of SAN BERNARDINO COUNTY, CALIF., 92408**

SELF HELP

#	DEVELOPMENTAL TASK	COMMENT	PRE	MID	POST
1	Holds drinking glass /cup with one hand				
2	Serves food to self with utensils				
3	Manages zipper and buttons on clothes				
4	Unassisted toileting without accidents				
5	Washes and dries hands unassisted				
6	Brushes teeth without assistance				
7	Puts on shoes and fastens, ties laces				
8	Wipes nose with tissue				
9	Feeds self with proper utensils				
10	Puts on coat and fastens				
		Totals			

FINE MOTOR

#	DEVELOPMENTAL TASK	COMMENT	PRE	MID	POST
11	Copies circle from example				
12	Snips paper with scissors				
13	Cuts on straight line with scissors				
14	Cuts on curved line with scissors				
15	Thumb-finger grasp to hold crayon				
16	Puts six piece jigsaw puzzle together				
17	Strings 10 large beads in 30 seconds				
18	Stacks 9 one inch blocks in 30 seconds				
19	Copies cross & square from examples				
20	Draws a boy or girl				
		Totals			

Figure 3b.

GROSS MOTOR

#	DEVELOPMENTAL TASK	COMMENT	PRE	MID	POST
21	Walks on tiptoes for 10 steps				
22	Walks on line or balance beam for 4 ft.				
23	Hops on one foot for 5 hops				
24	Climbs 4 ladder rungs				
25	Catches bounced playground ball at 5 ft.				
26	Stands on one foot for 10 seconds				
27	Jumps in place for 30 seconds				
28	Rides, steers, pedals tricycle				
29	Throws bean bag at least 5 feet				
30	Kicks playground ball 10 feet				
		Totals			

SOCIAL/EMOTIONAL

#	DEVELOPMENTAL TASK	COMMENT	PRE	MID	POST
31	Separates easily from parent/guardian				
32	Shares toys with other children				
33	Puts toys away in proper places				
34	Plays cooperatively with other children				
35	Plays dramatically with other children				
36	Takes turns with other children				
37	Plays appropriately in group games				
38	Plays independently from other children				
39	Tries new social/group experiences				
40	Is friendly, talks easily with others				
		Totals			

Figure 3c.

THINKING

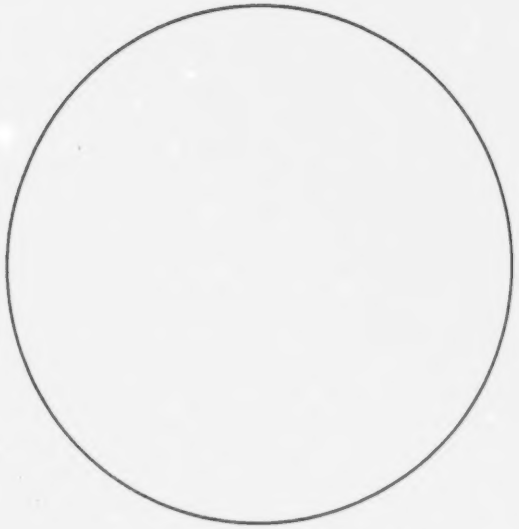
#	DEVELOPMENTAL TASK	COMMENT	PRE	MID	POST
41	Points to shapes (circle, square, cross)				
42	Names shapes (circle, square, traingle)				
43	Points to four colors (# 44 below)				
44	Names colors (red, yellow, blue, green)				
45	Sorts by two colors (use 10 blocks)				
46	Counts correctly to 20				
47	Repeats 3 numbers in correct sequences				
48	Recalls 3 recent classroom activities				
49	Points to "big" and "little" objects				
50	Attends to 5 minute preschool story				
		Totals			

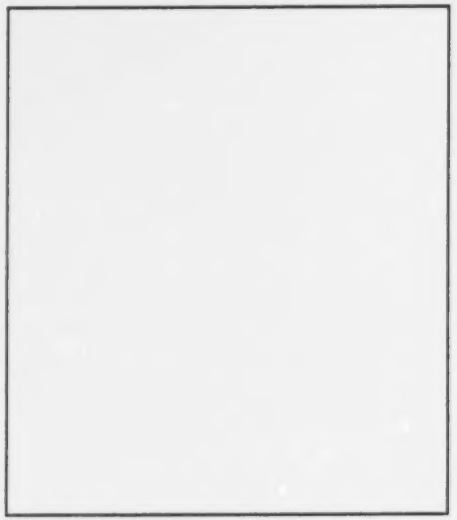
LANGUAGE (English or other primary language)

#	DEVELOPMENTAL TASK	COMMENT	PRE	MID	POST
51	Uses sentences with at least 4 words				
52	Asks questions about persons & objects				
53	Responds to and makes verbal greetings				
54	Tells own first and last name				
55	Expresses feelings with words				
56	Follows 3 simple directions in sequence				
57	Makes verbal plans for next activities				
58	Repeats sentence of at least 5 words				
59	Puts block "in, under, & on the box"				
60	Repeats nursery rhyme/song of 4 lines				
		Totals			
		Grand Totals			

Figure 3d.

PLEASE DRAW THESE SHAPES IN BLANK SPACE - POST SCREEN





12

15

Figure 3e.

16

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SPEECH SCREEN

CHILD'S LAST NAME _____ FIRST _____ SITE _____

BIRTH DATE _____ M/F SEX _____ AGE _____ DATE SCREENED _____ DATE ENROLLED _____

LANGUAGE CHILD SPEAKS _____ TEACHER _____ AM PM FD

PART I
ARTICULATION

Practice words: dog, cat

/m/	mop	tomato	time
/n/	nail	penny	pan
/p/	pig	apple	nap
/h/	hand	playhouse	-----
/w/	web	pow-wow	-----
/b/	bite	baby	tub
/k/	key	pocket	book
/g/	gum	doggie	bug
/f/	feet	telephone	off
/y/	yes	yo-yo	-----
/ng/	-----	king-kong	ring
/d/	dime	indian	dad
/t/	toe	kitten	boat

CENTRAL OFFICE WILL SCORE	
DATE _____	INITIAL _____
☐ PASSED	
☐ RESCREEN _____	
☐ DISABILITIES UNIT WILL RESCREEN	
☐ COMPLETE _____ & RETURN	
☐ CERTIFIED _____	
☐ OTHER _____	

Additional Mis-Articulations: _____

PART II
SENTENCE IMITATION

1. I like candy. _____
2. I have new shoes. _____
3. He is my friend. _____
4. This is my coat. _____

Is parent concerned? ☐ YES ☐ NO

Is child receiving speech therapy? ☐ YES ☐ NO

Is teacher concerned? ☐ YES ☐ NO

Figure 4a.
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Rev. 7/93 Disabl\Speech screen.024

PART III

RECEPTIVE LANGUAGE

USE + FOR CORRECT
USE - FOR INCORRECT

1. Show me your" (identifies body parts)

a) eyes	_____	e) hand	_____	i) mouth	_____
b) nose	_____	f) teeth	_____	j) leg	_____
c) feet	_____	g) head	_____	k) tummy	_____
d) arm	_____	h) ear	_____	l) finger	_____

EXPRESSIVE LANGUAGE

2. "What's This" (Labels/names objects)

a) table	_____	e) shoe	_____	i) block	_____
b) chair	_____	f) floor	_____	j) pencil	_____
c) door	_____	g) sock	_____	k) book	_____
d) phone	_____	h) ball	_____	l) doll	_____

SUMMARY

CHECK APPROPRIATE BOXES

3. STUTTERING: ☐ Never ☐ Occasionally ☐ Frequently

4. ARTICULATION: (Choose one)

☐ Child's speech is easily understood.

☐ Child's speech is sometimes difficult to understand.

☐ Child's speech is very difficult to understand.

☐ I am concerned about articulation skills? (explain below)

5. LANGUAGE: (Choose one)

☐ Child uses 4-5 word sentences.

☐ Child uses 3-4 word sentences.

☐ Child uses 2-3 word sentences.

☐ Child sounds like a much younger child.

☐ Child does not use words to communicate.

☐ I am concerned about language skills? (explain below)

Explain your concerns: _____

_____

_____

_____

TEST MATERIALS: book, phone, doll, ball, block, pencil

Figure 4b.

EMOTIONAL / BEHAVIOR DISORDERS

NAME_____ D.O.B._____ SEX___ DATE_____

SITE_____ AM/PM_____ REPORTER_____

BEHAVIOR DISORDERS/PROBLEMS (Please mark each item in the proper column at right: Use your knowledge of normal child development to judge frequency or severity of observed behaviors/problems. Your comments are helpful. Thank you.	USUALLY	OFTEN	SELDOM	NONE

#	OBSERVATION	COMMENTS				
1	Hits, bites, kicks, hurts others					
2	Damages own or other's things					
3	Has temper tantrums; demands own way					
4	Does not follow preschool rules					
5	Teases, threatens, swears at others					
6	Lies, cheats, steals, blames others					
7	Yells, burps, interrupts, is rude					
8	Clings to or touches others					
9	Is withdrawn, very fearful &/or shy					
10	Soils or wets self					
11	Masturbates, tries sex play					
12	Restless, does not finish tasks					
13	Is clumsy, loses balance, drops items					
14	Cries often or seems very sad					
15	Makes strange sounds, talks to self					
16	Easily distracted, doesn't pay attention					
17	Is cruel, angry &/or fights with others					
18	Has repeated unexplained absences					
19	Argues, refuses adult requests					
20	Annoys, aggravates others					
21	Other (Specify)					

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Figure 5.

when they are most amenable to corrective or preventative actions.

The subsequent linking of individualized developmental profiles, which are generated by screening and assessment, with developmentally appropriate preschool experiences and curricula is the goal of such screening and assessment. The developmental status of individual children and classroom groups, manifest and systematically recorded from the beginning of a preschool program year, compared with their respective developmental status at the end of the year are presented and discussed as sensitive, "value-added" indices to a preschool program's success at supporting and facilitating normal child growth and development. However, it is not suggested that teachers or programs be evaluated by developmental "scores" obtained by the child (and family) participants.

For purposes of this research, a child's and Head Start class's developmental status is sampled using a locally generated Child Developmental Screening Form (PSD & Meier, 1990) which includes 60 observable behaviors representative of standard developmental milestones from most domains, namely Self-Help, Fine Motor, Gross Motor, Social/Emotional, Thinking/ Cognitive, and Language domains. Other developmental domains, such as Academic Readiness, Creativity, Survival Knowledge, Family Coping Dynamics, etc. are additional possibilities for obtaining a more complete sketch of a child's (and family's) functional capabilities and environmental resources.

Comparative consideration was given to the rationale, contents and procedures underlying other widely used or promising screening instruments,

are kaleidoscopic, depending upon what instrument is being used and what is being sought. In order for the screening and assessment results to be optimally useful in massive compensatory early intervention/remediation programs such as Head Start, a systems approach to normal and abnormal individual child development is necessary and some suggestions for implementation of individualized learning experiences are advanced. These suggestions go beyond Head Start's current central goal of developing and facilitating social competence (Zigler, et al., 1978, 1991 & 1992) to each child's personal excellence (Meier, 1992) in response to concerns raised in "Ready or Not, Here They Come" (California Dept. of Education, 1988) and the U.S. Office of Education's Goals 2000: The Educate America Act, first national goal that all preschool children be prepared to enter school "ready to learn" the academic curriculum (McDonald, 1991).

Procedure and Population

All teachers and aides attended a pre-program inservice training, which was focused on the standard milestones of normal child growth and development during the preschool years. Various approaches to screening for problems and disabilities were presented and discussed. The PSD Child Development Screening Form was used as the "curriculum" for the training, and participants were encouraged to ask questions and make suggestions for its improvement, which resulted in the revised version of the Child Development Screening Form included herein (Fig. 3).

During the first 45 days of the program years 1991-92 and 1992-93,

primarily during October of each program year, the "Pre-program" screening occured; during the last month, primarily May, the "Post-program" screening occured. These data were reported on a SCREENING Class Summary Form, Figure 6, at the end of each program year[2]. Children who joined the program after October or dropped out before May were excluded from this pre-post comparison study. For purposes of this report, a total of 2753 children, 4 and 5 years of age, attending Head Start programs at 28 widely scattered sites comprise the subject population. This total number represents all the children in program year 1992-93 who had both a pre- and post-program developmental screening -- there is a nearly 25% attrition of children and families each year; since the data were quite similar for the preceding program year 1991-92, it was decided that one year's sample was enough for this initial review.

Results and Discussion

As shown in Figure 7, there were demonstrable developmental gains for all of 2753 children in all developmental domains; the greatest absolute gains were in the Socio/Emotional and Language domains -- each about 9 points out of a possible 20. The Average gain across all domains was about 6 points out of a possible 20 in each domain.

Figure 8 represents a subset of 243 Head Start children, who were certified to have one or more disabilities; the greatest absolute gain was about 13 points out of a possible 20 in the Socio/Emotional domain. Since language

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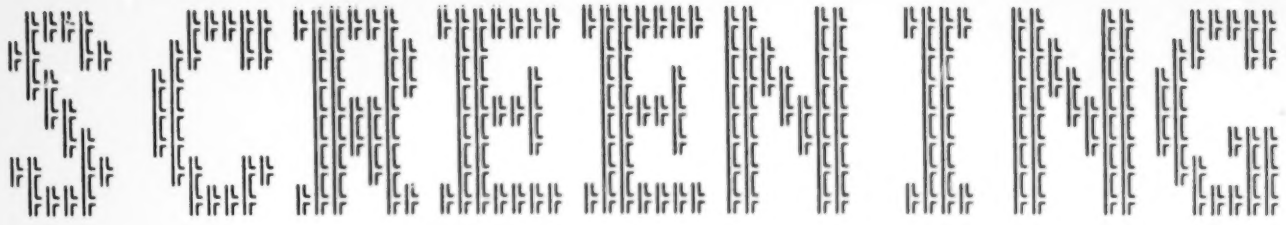
[2]The writer is grateful to Karen Terrazas, an intern in child development from Calif. State Univ. San Bernardino, for performing the preliminary data analysis for PY 1992-93.



CLASS SUMMARY FORM

SITE NAME_____ PRE-TEST_____ (date) POST-TEST_____ (date)

TEACHER_____ CLASS (# ; am or pm)_____

CHILD'S NAME (last, first)	DATE OF BIRTH	PRE-TEST RESULTS							POST-TEST RESULTS						
		SH	FM	GM	SE	TH	LA	TOTAL	SH	FM	GM	SE	TH	LA	TOTAL

PERSON COMPLETING FORM_____ DATE_____

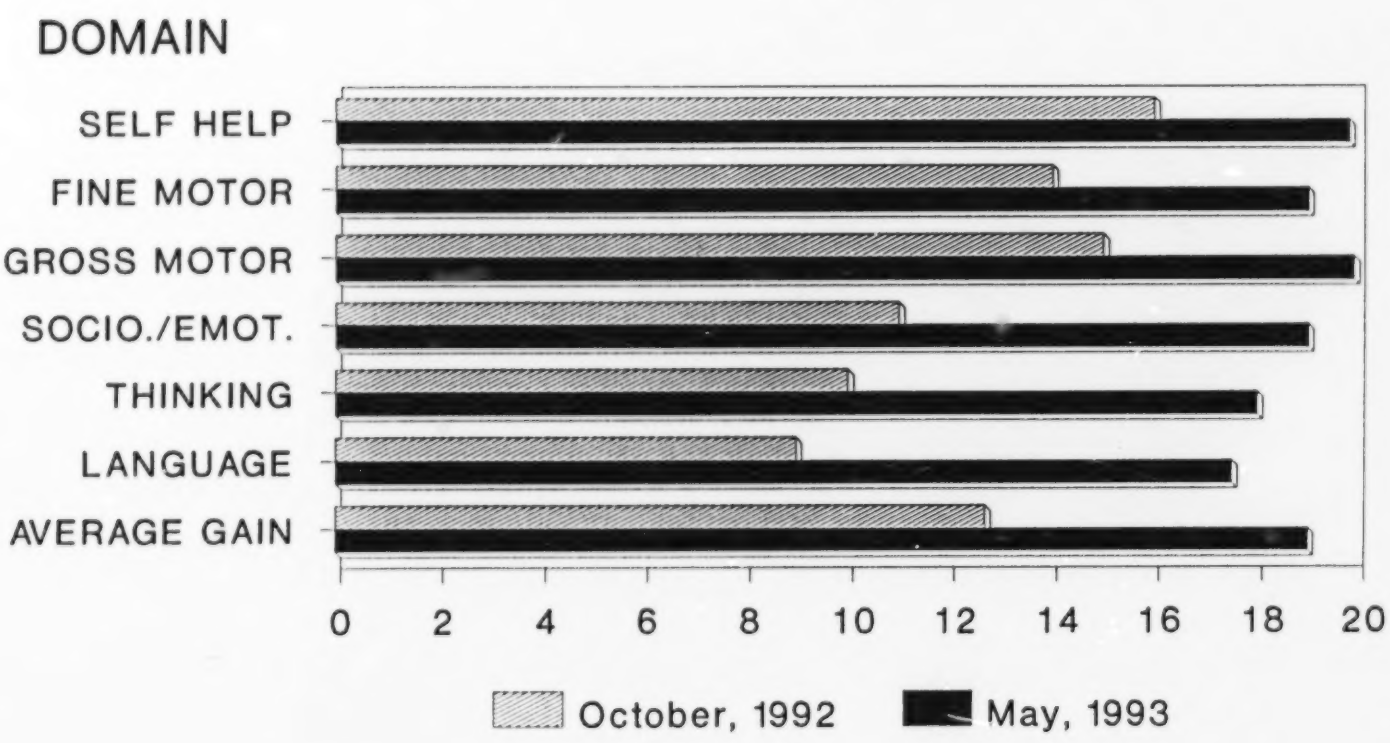
SIGNATURE_____

Please return completed form to:

PRESCHOOL SERVICES DEPARTMENT
686 EAST MILL STREET
SAN BERNARDINO, CA 92408-1610

Figure 6.

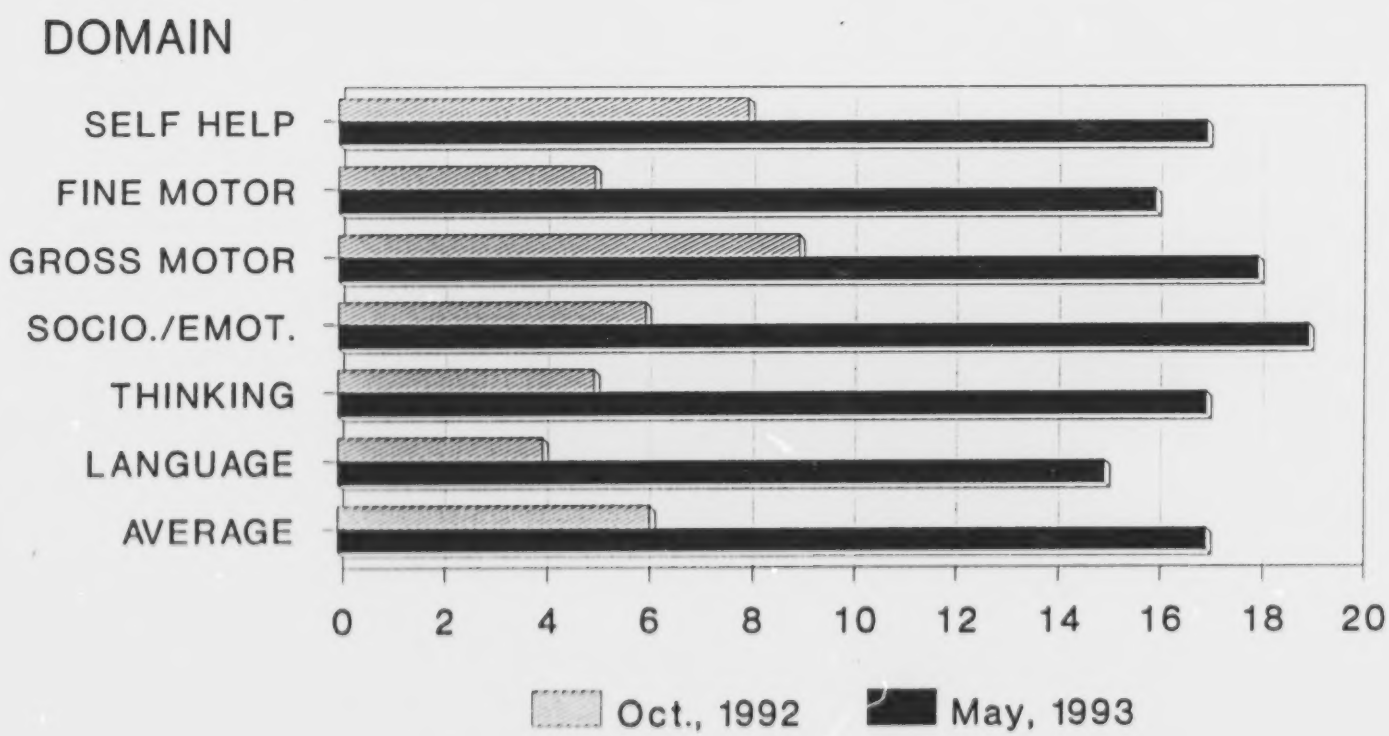
DEVELOPMENTAL GAINS
SCREENING RESULTS



N = 2753, 4 & 5 yr. olds
Begin. & End of Program
28 HEAD START sites

Figure 7.

DEVELOPMENTAL PROGRESS
CHILDREN WITH DISABILITIES



N = 243 HEAD START children
with certified disabilities
PRESCHOOL SERVICES DEPARTMENT

Figure 8.

disabilities account for nearly two thirds of the disabilities (please see Fig. 9 for more detailed breakout), and many children are quite defective in language ability upon enrollment in Head Start, the average of 11 points progress in the Language domain is quite remarkable. Moreover, since the children with disabilities have considerably lower scores, on average, in all developmental domains upon entry into the program, their overall average gain of 11 points is most gratifying.

Although all 2753 children included in this study showed an overall increase of about 6 points out of a possible 20 points (about 36 points out of a total 120), the vast majority entered the program already able to do more than one half of the developmental tasks included in the screening form. There was a deliberate effort to include a number of tasks which some normally developing three-year-olds are beginning to master in order to give the normal four- and five-year-olds a feeling of competence and encouragement to try all of the items, including the more difficult ones.

Moreover, the extended range of difficulty also ensured that even the children with disabilities would be able to do some of the easiest tasks, thereby establishing a base performance. Because their disabilities were manifested in varous combinations of domains, the children with disabilities had less success on average at the pre-program and post-program screening, but as a group the children with disabilities showed the greater average gain of 11 out of a possible 20 points or 66 out of a total possible 120 points (please see Fig. 10 for this comparison).

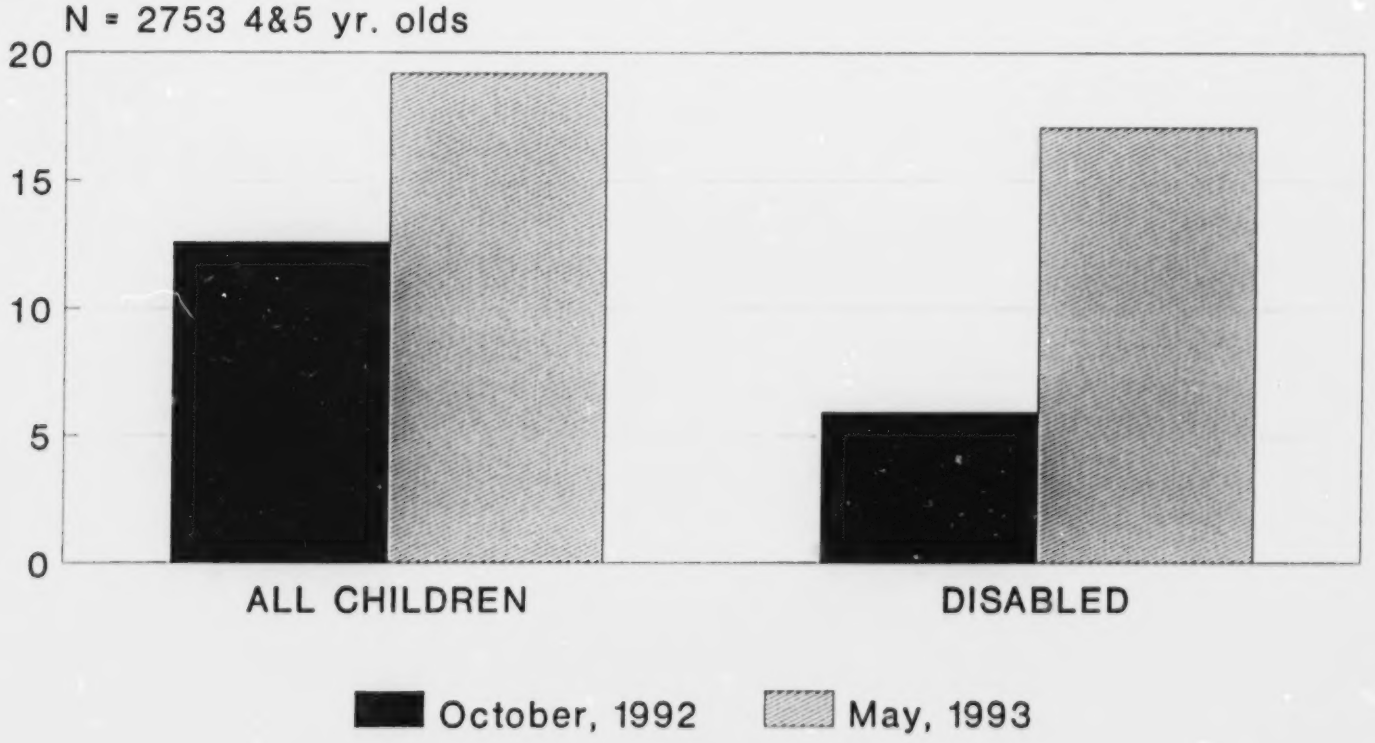
CHILD DISABILITIES
HEAD START FY 1991-92

ALL CHILD DISABILITIES

LANGUAGE DISORDERS

Figure 9.

AVERAGE DEVELOPMENT
HEAD START SCREENING



Gains during PY 1992-93
Preschool Services Dept.
San Bernardino County

Although no attempt has been made to determine a cut-off score to "red-flag" especially needy or high-risk children, a total score below 60 or a subtotal score of less than 10 on any given developmental domain should raise one's index of suspicion that a given child be checked out more carefully. There may also be instances wherein a given teacher or aide who administers the screen is unduly stingy or generous in crediting a child's performance, and/or wherein a rating teacher or aide disagrees with the child's parent(s) in terms of what a child can or cannot do at school versus at home; however, these relatively minor differences wash out in the group data and averaging for this report.

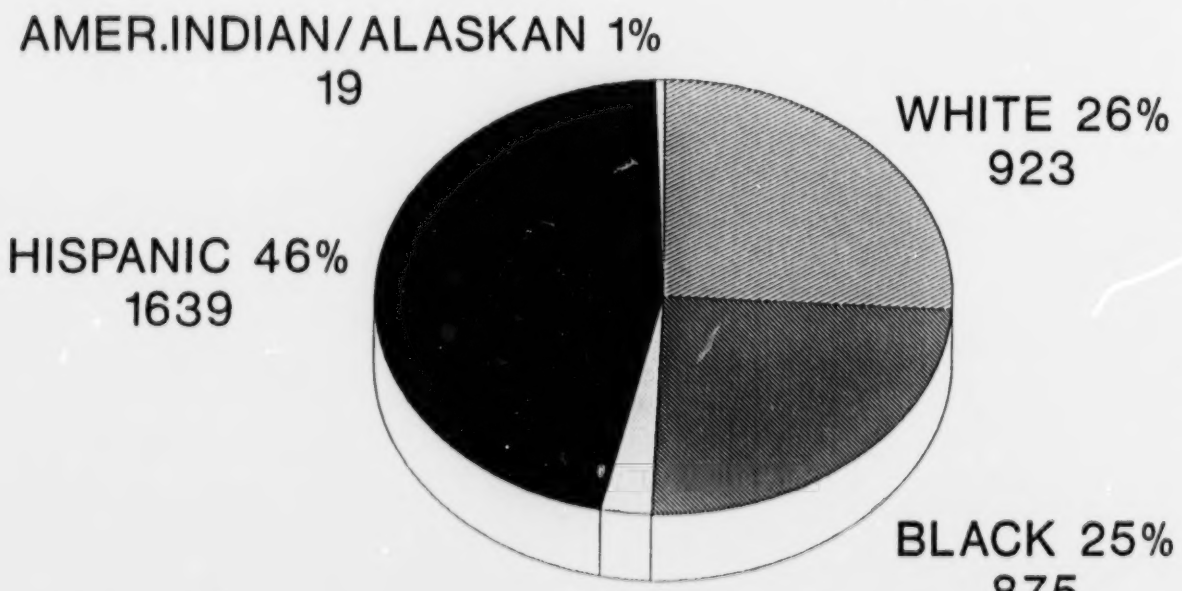
It appears that the current version of the Child Development Screening Form has a developmentally appropriate set of items, with a range of difficulty sensitive to differentiating this age group's developmental trajectories and variations, is user- and child-friendly, is economical in both material and professional time costs, and meets the requirements of the Head Start Performance Standards.

However, establishing a given child's developmental status could lead to a paralysis of analysis and simply reveal that a child does or does not fall within the normal range -- furthermore, much of the developmental progress is a function of time passage and the attendant maturation of various developmental capacities, given minimum opportunity or stimulation. Early developmental screening should also lead to further assessment and evaluation of suspicious screening results and contribute to individualized and clearly targeted intervention and enrichment programs. It would be quite interesting to plot

potential developmental trajectories for various disabilities and to track any shifts in "slope of the curves" as a result of intervention and in comparison to matched controls, who receive no or different intervention. Although the number of children (N = 2753) in this study is respectable and the Ethnic Distribution is diverse (please see Fig. 11), it would be necessary to replicate these findings in other Head Start populations throughout the U. S. to further fine tune and standardize the forms and approach. Moreover, it would be desirable to perform a thorough item analysis to determine which items are the most valid, reliable, and generally useful for this application.

A coincidental concurrent validation of the Child Development Screening Form occurred in PY 1992-93 when several PSD Head Start classes used both the PSD Child Developmental Screening Form and the MAPS (Measures and Planning System, Bergan & Feld, 1990), which is more oriented toward "academic achievement" in that it assesses and tracks a child's growing knowledge of early math, emerging literacy, nature & science discovery, and social development. It was reassuring to discover a high correlation between the systematic estimates of developmental progress and academic advances made by the children who were described by both approaches. Both approaches are admittedly only the first steps in designing individualized, developmentally appropriate experiences to enable and facilitate a given child's continued progress through normal developmental milestones and up the academic ladder (MAPS is especially appropriate for assessing readiness for transition into public school kindergarten).

ETHNIC DISTRIBUTION
PSD HEAD START FAMILIES



1992-93 PIR; p.20, 24.A Total Enrollment
(PSD & Delegate Agencies - C.25% atrtn.)

Figure 11.

There are innumerable intervention, remediation and facilitation guides, programs, etc. which a resourceful and knowledgable preschool teacher or aide can draw from to meet the ideosyncratic needs of each child. Such resources can be linked (see Bagnato, Neisworth, & Munson, 1989) to specific deficits either by developmental domain (Meier, System for Open Learning, 1992) or by academic area (Bergan & Feld, 1993). It is hoped that rather than treating all preschoolers alike, preschool professionals will identify strengths and weaknesses of each child early in each program year and individually tailor the experience to best fit and facilitate each child's optimum growth and development.

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ABSTRACT

This paper presents an historical, theoretical, and empirical review of developmental screening and assessment of preschool children. The discussion is anchored in current findings from ongoing research in a large, multi-centered, multi-ethnic, Head Start Program serving about 5000 children and families each program year. Various instruments and procedures are compared and suggestions are offered for a synthesis and implementation of a comprehensive program to promote optimal child growth and development through systematic screening, assessment and individualized intervention for each Head Start participant.